

Work Order ID 55176

January 8, 2010 1:10:32 PM



Page 1

Item ID: D3211-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket

Start Date: 08/01/2010 Start Qty: 12.00

Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 12.00

Customer:

Reference:

Run Start



Approvals:

Process Plan:

BSJ

Date: 10-1-08

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3211

Rev A1

*MAT NOT PULL 1
OUT OF MAT*

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3211 ☐ Dwg Rev: A1 ☐ Prog Rev: A1 ☐ 2-
Deburr if necessary

HB 10-1-11

(9)

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

HB 10-1-11

PHO ->

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

2) 810601/12

(K9)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3211-1 PAR #: _____ Fault Category: Small Fib / Water Jet NCR: (Yes) No DQA: _____ Date: 10/03/16
 Resolution: Accepted Disposition: use as is QA: N/C Closed: HS Date: 10/03/16

NCR: <u>55176</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>10/1/12</u>	<u>#100</u>	<u>Qty x2 parts have a small cut out (miss a corner at top left hand corner). EC parts were at top of sheet.</u>	<u>GP</u> <u>10.01.12</u> <u>per</u> <u>QS1042</u>	<u>Build to blend in so cannot be noticed - Non structural area of PART.</u>	<u>HS</u> <u>10-1-12</u>	<u>S</u> <u>10/4/12</u>	<u>GP</u> <u>10.01.12</u> <u>per</u> <u>QS1042</u>	<u>S</u> <u>10/6/12</u>
								<u>S</u> <u>10/6/12</u>

NOTE: Date & initial all entries

Work Order ID 55176

January 8, 2010 1:10:32 PM

Page 2

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Item Name: Bracket

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Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 12.00

Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130

0.00



Small Fab

Small Fab

Memo

0.00

Small Fab

Deburr

N/A

140

0.00



NC BRAKE

Brake NC

Memo

0.00

Brake NC

Bend D3211-1 Stack as per Dwg D3211

EB 10/03/02

B

PTU

150

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

S. 10/03/02

XS

Quality Control

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3211-1 PAR #: _____ Fault Category: Small Fabs NCR: Yes No DQA: 2 Date: 10/03/16
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: 2 Date: 10/03/16

NCR: <u>55176</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>10-03-02</u>	<u>140</u>	<u>1 part cracked during bending</u> <u>with a 1/8" radius.</u> <u>R.C. process</u>	<u>[Signature]</u>	<u>use a .156" Rad -> parts</u> <u>do not seem to crack with</u> <u>the larger radius: part</u> <u>is to drawing.</u>	<u>SD</u> <u>10/03/02</u>	<u>S</u> <u>10/03/02</u>	<u>[Signature]</u>	<u>[Signature]</u> <u>10-03-02</u>

NOTE: Date & initial all entries

Work Order ID 55176

January 8, 2010 1:10:32 PM



Page 3

Item ID: D3211-1

Accept



Setup Start



Revision ID:

Stop



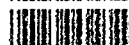
Item Name: Bracket

Start Date: 08/01/2010 Start Qty: 12.00



Cust Item ID:

Required Date: 18/01/2010 Req Qty: 12.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Draw
Number

Draw
Rev.

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

Chemical Conversion Coat per QSI005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

Handwritten: 10/03/04 (X8) ✓

170

Black Sandtex(Ref:4.3.5.7) per QSI005 4.3

0.00



Powdercoat

Memo

0.00

Powder Coating

Handwritten: 11:00 AM START TIME: 11:30 AM FINISH TIME: 320°F OVEN TEMPERATURE:

Handwritten: 10/03/04 (X8) ✓

180

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

Handwritten: 10-3-4 (5)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 55176

Page 4

January 8, 2010 1:10:32 PM

Item ID: D3211-1

Accept



Setup Start



Revision ID:

Stop



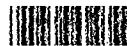
Item Name: Bracket

Start Date: 08/01/2010 Start Qty: 12.00



Cust Item ID:

Required Date: 18/01/2010 Req'd Qty: 12.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

Identify as per dwg & Stock Location 211

0.00



Packaging

Memo

0.00

Packaging

10-3-5

SV

(82) SQ

200

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/03/11 HJ

MF 10-3-5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

January 8, 2010 1:10:36 PM

Page 1

Work Order ID: 55176

Parent Item: D3211-1

Parent Item Name: Bracket

Start Date: 08/01/2010

Required Date: 18/01/2010

Comments: IPP Rev:A New Issue 05-11-17 JLM
IPP Rev:B Now on Waterjet 06-10-24 JLM

Start Qty: 12.00

Required Qty: 12.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
M2024T3S.063		Purchased	No			100	sf	24.4396	17.7474	14.		



2024-T3 .063 sheet



R 10-1-11

Warehouse	Loc Qty	Loc Code
Location		
Main Warehouse		
MAT	24.43962419	
102942	1.5	
105916	1.09	
106223	1.47	
109463	0.00947368	
110980	5.4854	
111787	12.8847505	
19059	2	

111789

9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3211	REV. A SHEET 1 OF 2
DATE 03.09.03		TITLE BRACKET	SCALE 1:3
A	03.09.03	NEW ISSUE	
A1	03.12.05	CHANGE ALL BEND RADII TO R0.125	

RELEASED
03.09.03

DEO ATTACHED

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 55176-
P/10-1-05

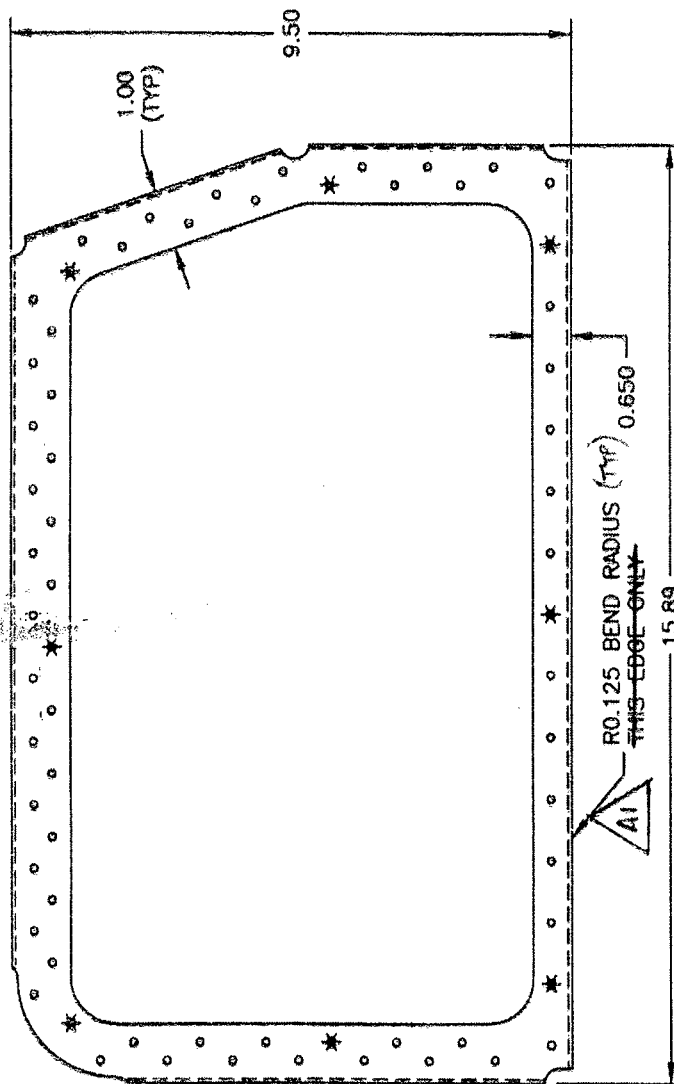
D3211-1 BRACKET
MACHINE PER DRAWING FILE "D3211-A2.DWG"

CHECK PER TEMPLATE D3211-1T1

MATERIAL: 2024-T3 (90-A-250/4) SHEET 0.063 THICK

FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1
POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3

USE MINIMUM BEND RADIUS OF 0.125" EXCEPT WHERE INDICATED 0.125"
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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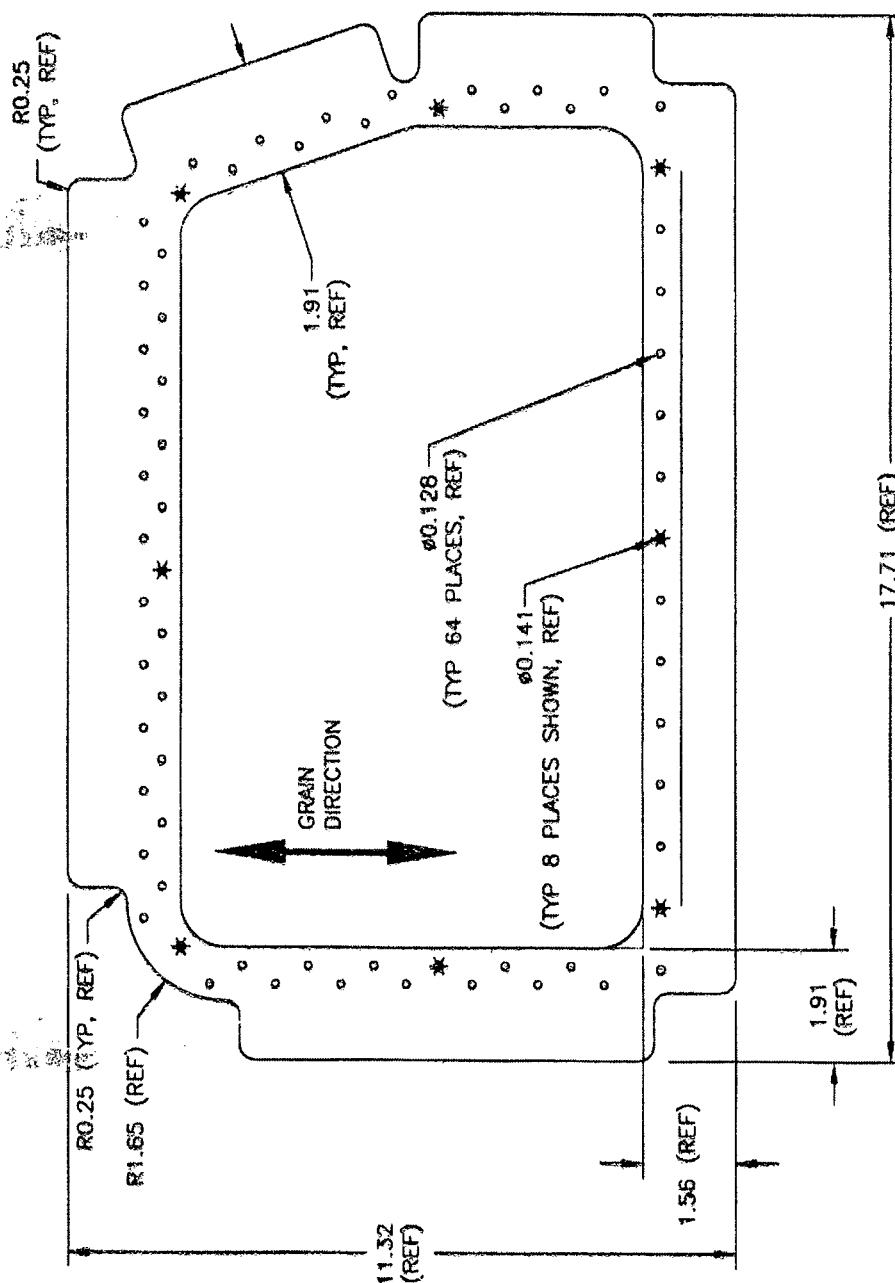


DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	w/b 55176 DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3211	REV. A SHEET 2 OF 2
DATE 03.09.03		TITLE BRACKET	SCALE 1:3

RELEASED
R 03 01.15

DEO ATTACHED

D3211-1 FLAT PATTERN



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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

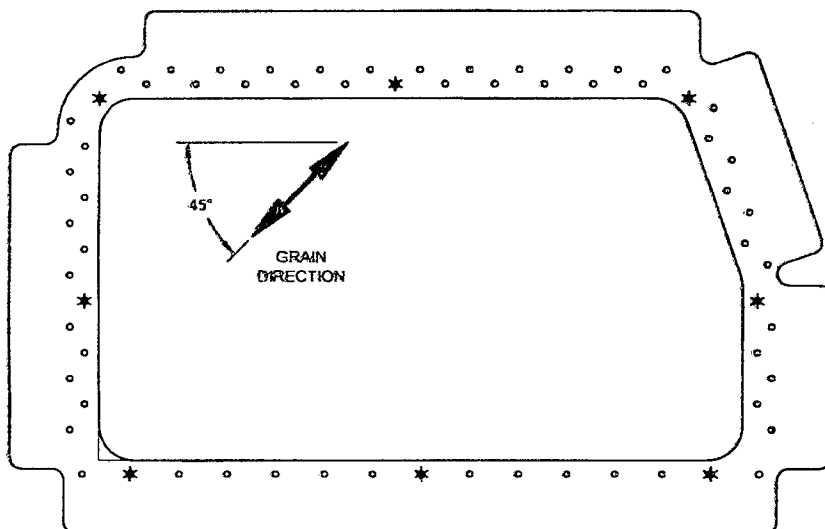
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

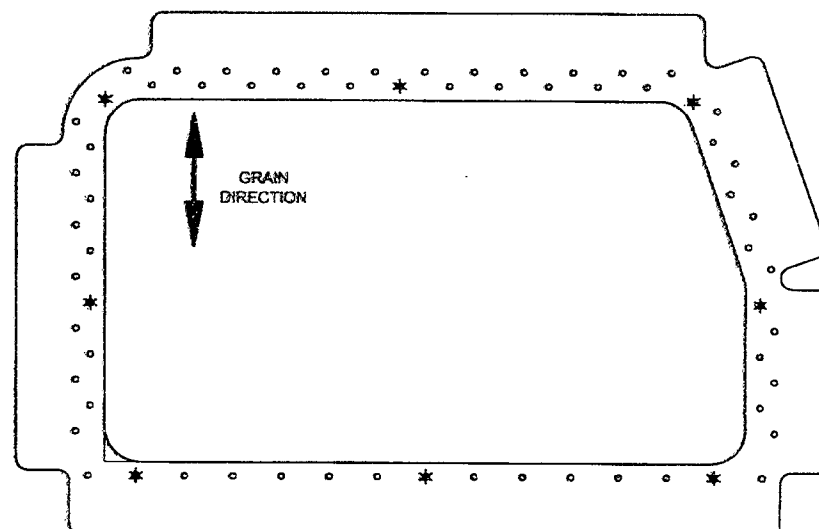
DRAWING NO. D3211	TITLE BRACKET	REV. A	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3211-A-2	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN AJS	CHECKED <i>[Signature]</i>	MFG. APPR. <i>[Signature]</i>	APPROVED <i>[Signature]</i>		DE APPR. <i>[Signature]</i>		
DATE 08.09.12	DATE 08.09.12	DATE 08.09.12	DATE 08.09.12		DATE 08.09.12		

SHEET 2 MODIFY GRAIN DIRECTION AS SHOWN BELOW TO FACILITATE BENDING (SEE CAR 08-001).

IS:



WAS:



RELEASED
08-09-12

ALL OTHER INFORMATION REMAINS UNCHANGED

416 / 35174
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